

29. A method for altering the composition of fatty acids in a plant cell, said method comprising the steps of:

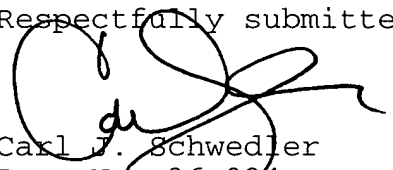
growing a plant under conditions wherein said plant produces long chain fatty acyl-CoA molecules, in the presence of an expression product of a β -ketoacyl-CoA synthase DNA sequence operably linked to regulatory elements for directing the expression of said DNA sequence such as to effect the contact between such long chain fatty acyl-CoA molecules and said β -ketoacyl-CoA synthase, wherein (i) said β -ketoacyl-CoA synthase is capable of catalyzing the production of very long chain fatty acids from a long chain fatty acyl-CoA substrate and malonyl-CoA, (ii) said DNA sequence is heterologous to said plant, and (iii) very long chain fatty acids are produced in said plant such as to alter the overall fatty acid composition of said plant cell.

CONCLUSION

In view of the above Amendments and remarks, it is respectfully submitted that this application is now in condition for allowance. Early notice to this effect is solicited.

If in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at the number provided below.

Respectfully submitted,


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